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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,130	12/15/2003	Ikuo Nakagawa	4777-36	5726
29540	7590	11/27/2007		
DAY PITNEY LLP 7 TIMES SQUARE NEW YORK, NY 10036-7311			EXAMINER TREAT, WILLIAM M	
			ART UNIT	PAPER NUMBER
			2181	
			MAIL DATE	DELIVERY MODE
			11/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/737,130

Applicant(s)

NAKAGAWA ET AL.

Examiner

William M. Treat

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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1. Claims 13-24 are presented for examination.
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 13-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saboff (Patent No. 6,154,878) in view of Segal (On-the-fly Program Modification: Systems for Dynamic Updating) and further in view of Tang et al. (Patent No. 7,209,449).

5. Saboff substantially taught the invention of exemplary claim 13 including a computing apparatus comprising: a pointer storage section storing a pointer for specifying an execution section for execution of computation (col. 16, line 62 through col. 17, line 12); a data storage section capable of storing a plurality of data (col. 7, lines 27-35); an execution instruction section causing the execution section specified by the

pointer stored in said pointer storage section to execute computation using the data stored in said data storage section (col. 7, lines 7-13); and a pointer management section changing the pointer stored in said pointer storage section from a first pointer to a second pointer (col. 14, lines 20-53), the first pointer specifying a first execution section and the second pointer specifying a second execution section (col. 17, lines 3-7 and col. 17, lines 26-29), wherein said data storage section is capable of keeping the data stored, after the pointer is changed by said pointer management section, such that said execution instruction section causes the second execution section to execute computation using the data that has been used by the first execution section (col. 7, lines 27-35).

6. Saboff did not specifically discuss use of his system in an Internet packet router. However, Segal taught use of a dynamic updating system such as Saboff's for the updating of an Internet packet router (pp. 61-62, the last paragraph of Prototype System). Tang makes clear that Internet packet routers inherently store data for routing information in the network and inherently execute computation involving routing information upon reception of packets, and Internet packet routers need the ability to update the event handler(s) responsible for packets without loss of data or erroneous actions (Background). Thus, there is a teaching of the use of systems such as Saboff's in Internet packet routers and motivation to do so. The application of Saboff's teachings to the Internet packet router environment merely represents a straight-forward application of his teachings to known technology and software and does not represent invention.

7. As to claim 14, Saboff taught the computing apparatus according to claim 1 wherein said pointer management section includes a function of deleting the pointer stored in said pointer storage section and a function of adding another pointer to said pointer storage section (col. 17, lines 3-7 and col. 17, lines 26-29). Since the Pointer Linkage Table always points to the new, current version of the software upon completion of the update process, the other pointer has been deleted.

8. As to claim 15, Saboff taught the computing apparatus according to claim 1 wherein said pointer management section includes a function of re-reading the execution section, by reading the second execution section in place of the first execution section (col. 17, lines 26-29). Once the pointer is updated, the Pointer Linkage Table will cause the second execution section to be read in place of the first execution section, as claimed by applicants.

9. As to claim 14, Saboff did not teach his pointer management section further has a function of reading a data conversion execution section for converting data stored in the data storage section. However, Segal taught this was a known problem and known solution in the art when data and data types inconsistent with the new software update were created by the old software (pp. 55-56, the section entitled Data type replacement).

10. As to claim 17, Saboff taught the computing apparatus according to claim 1, wherein said data storage section is capable of storing information of a version of the data, and said execution section is capable of executing computation using the data in

accordance with the version indicated by the information (col. 8, lines 20-24 and col. 11, lines 1-13).

11. As to claim 18, Saboff taught the computing apparatus according to claim 1, wherein said pointer management section includes a function of adding another execution section, and a function of adding another pointer specifying said another execution section means to said pointer storage section (col. 14, lines 21-27 and Fig. 6).

12. As to claim 19, Saboff taught the computing apparatus according to claim 1, wherein said pointer management section includes a function of deleting the execution section, and a function of deleting or changing said pointer stored in said pointer storage section, said pointer specifying the execution section deleted (col. 17, lines 29-34).

13. As to claims 20 and 21, Segal taught use of a dynamic updating system such as Saboff's for the updating of an Internet packet router (pp. 61-62, the last paragraph of Prototype System) which would meet the limitations of claims 20 and 21.

14. As to claim 22-24, they fail to teach or define over rejected claims 13-21.

15. Any inquiry concerning this communication should be directed to William M. Treat at telephone number (571) 272-4175.

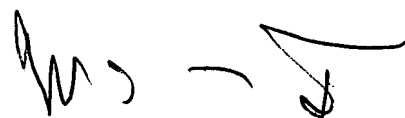
16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Wm - J'.

**WILLIAM M. TREAT  
PRIMARY EXAMINER**